

**Alaska Energy Authority - Bulk Fuel Upgrades****FY2024 Request: \$13,000,000****Reference No: 49734****AP/AL:** Appropriation**Project Type:** Energy**Category:** Development**Location:** Statewide**House District:** Statewide (HD 1-40)**Impact House District:** Statewide (HD 1-40)**Contact:** Curtis W. Thayer**Estimated Project Dates:** 07/01/2023 - 06/30/2028**Contact Phone:** (907)771-3000**Brief Summary and Statement of Need:**

The Bulk Fuel Upgrades (BFU) program will invest \$13 million in rural Alaska in FY2024. The BFU program upgrades non-compliant bulk fuel tank farms in rural communities. This project reduces the cost of energy by reducing or eliminating fuel loss from leaks, spills, or catastrophic failure. By providing enough capacity for current and planned needs, communities may purchase fuel in larger quantities at a lower cost per gallon. Projects ensure facilities meet code compliance standards improving life, health, and safety of the community.

<b>Funding:</b>	<b>FY2024</b>	<b>FY2025</b>	<b>FY2026</b>	<b>FY2027</b>	<b>FY2028</b>	<b>FY2029</b>	<b>Total</b>
1002 Fed Rcpts	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$45,000,000
1003 G/F Match	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$5,500,000	\$33,000,000
<b>Total:</b>	<b>\$13,000,000</b>	<b>\$13,000,000</b>	<b>\$13,000,000</b>	<b>\$13,000,000</b>	<b>\$13,000,000</b>	<b>\$13,000,000</b>	<b>\$78,000,000</b>

<input checked="" type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> Ongoing
20% = Minimum State Match % Required		<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Prior Funding History / Additional Information:**

Sec11 Ch11 SLA2022 P85 L13 HB281 \$13,000,000

Sec8 Ch19 SLA2021 P70 L19 HB69 \$13,000,000

Sec1 Ch19 SLA2018 P2 L19 SB142 \$17,000,000

Sec1 Ch1 SLA2017 P2 L22 SB23 \$2,420,000

Sec1 Ch2 SLA2016 P2 L18 SB138 \$1,300,000

Sec1 Ch18 SLA2014 P3 L33 SB119 \$7,300,000

Sec1 Ch16 SLA2013 P4 L14 SB18 \$6,000,000

Sec1 Ch17 SLA2012 P6 L9 SB160 \$7,000,000

Declining funds available for bulk fuel upgrades in rural Alaska means that bulk fuel tanks are not upgraded timely. As a result, communities are left with aging fuel tanks that may not meet the capacity needs of the community or are at risk of leaks, contamination, and/or failure. Recent emphasis has also been put on barge header projects to protect river and ocean side fuel systems.

**Project Description/Justification:**

This request includes federal receipt authority and state funds for bulk fuel tank farm upgrades.

The AEA is working in partnership with the Denali Commission on the FY2024 work plan to prioritize project selection. The projects preliminarily identified for construction are in the following communities: Scammon Bay, Ekwok, Shageluk and Birch Creek. The AEA and the Denali Commission will continue to refine the project selection and cost estimates over the following months.

State funds are used to leverage federal funds to expand the number of communities served by this program, which advances sustainable, efficient energy infrastructure projects that decrease energy costs in rural Alaska.

State matching funds are required for Denali Commission funded construction projects, 20 percent for distressed communities and 50 percent for non-distressed communities. The distressed community list is maintained by the Denali Commission.

Most of the rural tank farms have serious deficiencies that typically include:

- Inadequate dikes to contain fuel spills
- Inadequate foundations, which could cause gradual tank movement and fuel leakage
- Improper piping systems and joints, which are the most common source of fuel leaks
- Improper siting near wells, beaches, and buildings, or within a flood plain
- Tanks that are rusted or damaged beyond repair
- Electrical code violations
- Inadequate security

The deferred maintenance need for BFU is estimated at approximately \$864 million.

Denali Commission has provided \$480,000 in funding to AEA to begin an inventory and assessment of eligible rural bulk fuel facilities per 3 AAC 108.110 (b), (d), and (e). This will be a multi-year effort and provide accurate information regarding the condition of bulk fuel facilities which will enable the same benefits realized from the power systems inventory and assessment. In addition to the normal gathering and assessment of technical data, full three-dimensional (3D) imagery of the bulk fuel facility will be captured.

The AEA now uses 3D imaging and Geographic Information System (GIS) software to capture imagery, collect measurements, and process data to create, edit and share 3D renderings of rural bulk fuel facilities. This will be used for construction management, operator training, and remote assistance. The 3D platform enables AEA project managers to keep track of key project milestones and immediately assess project information. The targeted result is accelerated productivity, decision-making, and cost savings. Additionally, this information will be coordinated with the United States Coast Guard to improve compliance of the facilities. State matching funds will be required in future years.